

Application No.: 10/662,221

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**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

**Claim 1 (Currently Amended):** A buckler assembly in a tape drive to connect a drive leader to a cartridge leader, wherein the drive leader is connected to a take-up reel and the cartridge leader is connected to a magnetic tape in a tape cartridge, comprising:

a retainer member disposed on the buckler assembly that receives the drive leader to be connected to the cartridge leader; and

a sensor assembly disposed on the buckler assembly adjacent to the retainer member that detects the presence of the drive leader.

**Claim 2 (Currently Amended):** The buckler assembly of claim 1, further comprising:

a first component having:

a tube shaped section that rotates, and

an arm having a proximal end and a distal end, wherein the proximal end attaches to the tube-shaped section, and wherein the distal end attaches to the retainer member; and

a second component connected to the first component with a connector pin, wherein the second component rotates relative to the first component, and wherein the retainer member and the sensor assembly are disposed on the second component.

**Claim 3 (Original):** The buckler assembly of claim 1, wherein the drive leader includes a buckle bar configured to couple with the cartridge leader, wherein the buckle bar is magnetized, wherein the retainer member receives the buckle bar, and wherein the sensor assembly includes a hall sensor that detects a change in magnetic flux caused by the presence of the magnetized buckle bar.

**Claim 4 (Original):** The buckler assembly of claim 1, wherein the sensor assembly comprises:

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a magnetic member; and

a hall sensor that detects changes in the magnetic flux of the magnetic member.

**Claim 5 (Original):** The buckler assembly of claim 4, wherein the drive leader includes a buckle bar formed from a material that changes the magnetic flux of the magnetic member when the retainer member receives the buckle bar.

**Claim 6 (Original):** The buckler assembly of claim 4, wherein the hall sensor is disposed between the magnetic member and the drive leader when the retainer member receives the drive leader.

**Claim 7 (Original):** The buckler assembly of claim 1, further comprising:

a connector; and

a flex cable connected to the connector and the sensor assembly.

**Claim 8 (Currently Amended):** A tape drive comprising:

a take-up reel;

a drive leader connected to the take-up reel; and

a buckler assembly having:

a retainer member disposed on the buckler assembly that receives the drive leader; and

a sensor assembly disposed on the buckler assembly adjacent to the retainer member that detects the presence of the drive leader.

**Claim 9 (Original):** The tape drive of claim 8, wherein the drive leader includes a buckle bar that engages with the retainer member.

**Claim 10 (Original):** The tape drive of claim 9, wherein the buckle bar is magnetized, and wherein the sensor assembly includes a hall sensor that detects a change in magnetic flux caused by the magnetized buckle bar.

**Claim 11 (Original):** The tape drive of claim 9, wherein the sensor assembly comprises:

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a magnetic member; and

a hall sensor that detects changes in the magnetic flux of the magnetic member.

**Claim 12 (Original):** The tape drive of claim 11, wherein the hall sensor is disposed between the magnetic member and the drive leader when the retainer member receives the drive leader.

**Claim 13 (Currently Amended):** A method of loading a tape cartridge with a magnetic tape into a tape drive, the method comprising:

receiving the tape cartridge in the tape drive;

positioning a drive leader in a buckler assembly, wherein the drive leader is attached to a take-up reel in the tape drive;

connecting the drive leader to a cartridge leader attached to the magnetic tape in the tape cartridge using the buckler assembly;

detecting the presence of the drive leader in the buckler assembly; and

when the present presence of the drive leader in the buckler assembly is detected, pulling the drive leader to extract the magnetic tape from the tape cartridge.

**Claim 14 (Original):** The method of claim 13, further comprising:

when the present of the drive in the buckler assembly is not detected, indicating an error.

**Claim 15 (Original):** The method of claim 13, wherein detecting the presence of the drive leader in the buckler assembly comprises:

using a sensor assembly disposed on the buckler assembly to detect the presence of the drive leader.

**Claim 16 (Original):** The method of claim 15, wherein the sensor assembly includes a hall sensor, and detecting the presence of the drive leader includes sensing a change in a magnetic flux using the hall sensor when the drive leader is positioned in the buckler assembly.